



# Addendum: Litter Impaction of the Lower Intestinal Tract in Female Broiler Breeders

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## SUMMARY

Following preparation of this poster, hens from a flock of 21 week old broiler breeders were found to have lower intestinal tract litter impaction. The flock was uniform and in good condition. The flock had been moved onto the farm within 48 hours of our visit. Because no other disease was apparent, this case supports our theory that lower intestinal litter impaction likely results from an abrupt change in feeding, which impairs the ability to find feed and predisposes to subsequent litter eating. Why litter becomes impacted in the cloaca and does not pass out in the feces is unknown, but may be related to quantity of litter consumed by the bird or litter characteristics.

## CASE REPORT

A flock of 21 week old broiler breeders was evaluated to find the cause of wet vents and elevated mortality in older birds within the company. Overall the flock was uniform and birds were in good condition. Three female birds were culled because their vents and surrounding feathers were caked with urates (Fig. 1). Severe impaction of the lower intestinal tract with a large, hard compacted mass of litter and feces was found in the cloaca just above the vent (Figs. 2,3). Distention of the intestine with feces extended through the rectum and ileum into the lower jejunum. Gas had not accumulated in the affected intestine. The margin of the vents was dark, purple-red (arrow) and crusted with urates, but the cloacal mucosa was normal (Fig. 4). All three had litter in the gizzard (Fig. 5). Two birds had feed in the crop while the crop of the third bird contained litter, indicating she was totally off feed (Fig. 6). The latter bird was also moderately dehydrated.

These birds had been placed on the farm approximately 48 hours prior to our visit. This case expands the type of birds that may be affected to females and the predisposing condition to moving from the pullet to the laying farm. Older birds on the same farm were not found to have this condition. Due to the fact that this flock was in otherwise good health, we believe that this addendum further supports the theory provided for the original case presented in the poster that a sudden change in feeding regimen was responsible for these impactions. We feel these birds with litter impaction would have died or passed the compacted mass. In this case, competition for food from more aggressive birds was less likely than for the males reported in the original poster.

